REMARKS

The Office Action dated February 26, 2009 has been received and carefully considered. Reconsideration of the outstanding rejection in the present application is respectfully requested based on the following remarks.

Obviousness Rejection of Claims 1, 2, and 4-20

At page 2 of the Office Action, claims 1, 2, and 4-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Chrisop et al. (U.S. Patent Application Publication No. 2003/0043638), hereinafter referred to as Chrisop, and in view of Brady et al. (U.S. Patent No. 5,784,698), hereinafter referred to as Brady. This rejection is respectfully traversed.

Claim 1 recites "identifying at least **one active module of a plurality of modules of the multiple function integrated circuit** requiring a buffer based on the mode of operation; "determining **buffer requirements for the at least one active module**; [and] allocating memory space ... **based on the buffer requirements**." Thus, claim 1 allocating memory space based on the **buffer requirements of an active module of a plurality of modules** of a multiple function integrated circuit. The Office acknowledges at page 3 that Chrisop fails to disclose allocating memory based on buffer requirements. Thus, Chrisop necessarily fails to disclose or render obvious allocating memory based on the buffer requirements of an active module of a plurality of modules of a multiple function integrated circuit. Accordingly, the Office turns to column 2, line 57 through column 3, line 6 of Brady as disclosing these elements. However, as explained in the Response to Office Action filed December 15, 2008 (hereinafter, the "Previous Response") the cited portion indicates only that a buffer can be allocated in response to a request. There is no disclosure in Brady that the request is associated with buffer requirements for an active module of a plurality of modules of a multiple function integrated circuit in any manner. Thus, even if Chrisop and Brady were combined as proposed, the proposed combination would not allocate buffer space based on **buffer requirements for an active module** as proposed by claim 1. Instead, the proposed combination would either allocate buffer space based on user requests, as taught by Chrisop (see Chrisop, Abstract) or would allocate buffer space in response to a request from a processor, as taught by Brady at column 2, lines 57-62. Neither Chrisop nor

Brady provides any teaching of allocating buffer space based on buffer requirements for an active module of a plurality of modules of the multiple function integrated circuit. According, the proposed combination of references also fails to teach allocating buffer space based on buffer requirements for an active module of a plurality of modules of a multiple function integrated circuit, as provided by claim 1..

The Office responds at page 14 that Brady discloses at column 2, lines 57-62 allocating a buffer in response to a request and that "[t]he size of the buffer that is chosen for allocation is determined by selecting the buffer that is of the next larger size." However, as explained above, there is no disclosure that the requests received by Brady relate to the buffer requirements of an active module of a plurality of modules of a multiple function integrated circuit. Thus, even assuming *arguendo* that Chrisop discloses "identifying an active module" as provided by claim 1, and Brady discloses determining buffer requirements, the Office has failed to establish that either reference discloses or renders obvious "allocating memory space … **based on the buffer requirements**" as recited by claim 1.

In addition, as explained in the Previous Response, one skilled in the art would not combine the references as proposed because doing so would render Chrisop unsuitable for its intended purpose. *See MPEP*, § 2143.01. In particular, the stated purpose of Chrisop is to provide "a user interface, such as a front panel or web page, that permits a user to fine tune the RAM memory allocated for each component." *Chrisop*, paragraph [0012]. Thus, the intended purpose of Chrisop is to allow a user to set buffer space allocated in memory. *Id.* However, Brady provides an algorithm to allocate buffer space by allocating predefined "buffer pools." *Brady*, col. 6, lines 1-13. Because of the size of each buffer pool is predefined, more buffer space than was specifically requested may be allocated in response to a request. *Id.* Thus, the allocation algorithm of Brady sets buffer sizes according to the predefined pools, such that a user could not "fine tune" RAM memory allocated for a particular component. In other words, the proposed combination of Chrisop and Brady would result in a system whereby more buffer space than was specifically requested by a user would be allocated to a particular component and therefore would not satisfy the express purpose of Chrisop. Thus, the proposed combination of cited references would result in render Chrisop inoperable for its intended purpose. One skilled in the art would therefore not combine the references as proposed.

The Office responds at pages 15-16 of the Office Action that paragraph [0028] of Chrisop discloses that the allocator 104 operates within predetermined ranges to limit each RAM allocation, and that this teaches "there is some range that is prescribed for each allocation." For convenience, paragraph [0028] of Chrisop is set forth below:

> Typically, the allocator 104 operates within predetermined ranges to limit each RAM allocation. It is also typical that the interface 102 presents a memory configuration table GUI cross-referencing MFP functions to their respective RAM memory allocations. Then, the allocator 104 allocates RAM for MFP functions in response to the memory configuration table GUI.

Thus, the cited paragraph discloses that the allocator 104 allocates RAM for MFP functions based on requests received via a GUI, but that a predetermined range can **limit** the size of a particular allocation. Thus, the cited paragraph discloses that a particular allocation can be **smaller** than a requested size. However, as explained above, the proposed combination of Chrisop and Brady would result in allocations that are **larger** than a requested size. This is inconsistent with the express purpose of Chrisop and therefore one skilled in the art would not make the combination.

With respect to claim 7, the claim recites "determining buffer requirements for the at least one active module." For reasons similar to those set forth above with respect to claim 1, the cited references, individually and in combination, fail to disclose or render obvious at these elements of claim 7.

With respect to claim 14, the claim recites "operational instructions that cause the processing module to... determine buffer requirements for the at least one active module." For reasons similar to those set forth above with respect to claim 1, the cited references, individually and in combination, fail to disclose or render obvious at these elements of claim 14.

Claims 2 and 4-6 depend from claim 1. Claims 8-13 depend from claim 7. Claims 15-20 depend from claim 14. Accordingly, the cited references, individually and in combination, fail to disclose or render obvious at least one element of each of these dependent claims, at least by virtue of their respective dependence on claims 1, 7, and 14. In addition, these dependent claims recite additional novel elements.

To illustrate, claim 4 recites "in response to determining the change in the mode of operation, determining buffer requirements for the at least one other active module." As explained in the previous response, neither of the cited references discloses or renders obvious **determining buffer requirements** in response to determining a **change** in a mode of operation. The Office responds at page 15 of the Office Action that paragraph [0035] of Chrisop discloses that priorities may be assigned to various components of a system so that when memory contentions arise a higher-priority component will have precedence for memory. Thus, according to the Office, the combination of Chrisop and Brady would "determine the requirements for other modules as they begin to operate and potentially give priority to that function with respect to memory should the need arise." *Office Action*, page 15. The Office provides no support for its assertion that a combination of Chrisop and Brady would determine requirements for other modules as they begin to operation, nor is this disclosed by Chrisop and Brady in any manner. Instead, Chrisop discloses at paragraph [0035] that a user can assign priorities to various components of a system and that these priorities can effect the amount of memory allocated to a particular component. Neither the cited paragraph, nor any other portion of Chrisop or Brady discloses or renders obvious determining buffer requirements in response to determining a change in a mode of operation as recited by claim 4.

In view of the foregoing, withdrawal of the obviousness rejection of claims 1, 2, and 4-20 and reconsideration of the claims is respectfully requested.

Obviousness Rejection of Claim 3

At page 2 of the Office Action, claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Chrisop in view of Brady et al. and further in view of allegedly admitted prior art. This rejection is respectfully traversed.

Claim 3 depends from claim 1. As explained above, Chrisop and Brady, individually and in combination, fail to disclose or render obvious at least one element of claim 1. Accordingly, the cited references fail to disclose or render obvious at least one element of claim 3, at least by virtue of its dependence on claim 1. In addition, claim 3 recites additional novel elements. In particular, Applicant respectfully traverses the assertion in the Office Action that the features of claim 3 are admitted prior art. To illustrate, claim 3 recites "wherein the mode of operation

comprises at least one mode of operation selected from the group comprising: a digital audio player mode; a digital multimedia player mode; an extended memory device mode; a digital audio recorder mode; a digital multimedia recorder mode; and a personal data assistant." Claim 1 recites "identifying at least one active module of a plurality of modules of the multiple function integrated circuit requiring a buffer based on the mode of operation." The Office asserts that a personal data assistant is admitted prior art. However, claim 3, in combination with the features of claim 1, provides that the personal data assistant is a selected mode of a multiple function integrated circuit and recites identifying at least one active module of a plurality of modules of the multiple function integrated circuit device. These features are not admitted to be prior art in the Specification. Thus, the features of claim 3 are not admitted prior art as asserted by the Office.

In view of the foregoing, withdrawal of the obviousness rejection of claim and reconsideration of the claim is respectfully requested.

Conclusion

The Applicant respectfully submits that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number in order to expedite resolution of any issues and to expedite passage of the present application to issue.

The Commissioner is hereby authorized to charge any fees that may be required, or credit any overpayment, to Deposit Account Number 50-3797.

Respectfully submitted,

/Adam D. Sheehan/   April 27, 2009
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